1824. von Spix. Protocolle der öffentlichen Sitzungen der math.-physik. Classe d. k. bayer. Akad. Wiss. Mïnchen, IX, 1824, pp. 121-I 24, Taf.
1825. Verhoeff, C. Einige biologische Fragmente. Entom. Nachr., 1892, pp. 13, 14.
1826. Verrall, G. II. British Flies. London, Gurney and Jackson, Vol. Vifi, 1901, pp. 658-663.
1827. Wasmann, E. Vergleichende Studien über Ameisen- und Termitengaste. Tijdschr. v. Entom., XXXIII, 1890, pp. 27-96, Pl. I.
1828. Wasmannt, E. Verzeichniss der Ameisen und Ameisengäste von Holländisch Limburg. Tijdschr. v. Entom., XXXIV, 189I, pp. 39-64.
1829. Wasmann, E. Kritisches Verzeichnis der myrmekophilen und termitophilen Arthropoden. Berlin, Felix Dames, 1894, pp. vii, 231.
1830. Wheeler, W. M. Microdon Larvæ in Pseudomyrma Nests. 1'syche, Tuly, 1901, pp. 222-224, I fig.
1831. Wheeler, W. IK. On the Founding of Colonies by Queen Ants, with Special Reference to the Parasitic and Slave-making Species. Bull. Amer. Mus. Nat. Hist., XXII, 1906, pp. 33-105, pll. VIHI-XIV.
1832. Wheeler, W. 11. The Ants of Casco Bay, Maine, with Observations on Two Races of Formica sanguinea Latreille. Bull. Amer. Mus. Nat. Hist., XXLV, 1908, pp. 619-645.
1833. Williston, S. $W$. Synopsis of the North American Syrphidæ. Bull. U. S. Nat. Mus., No. 31, 1886, pp. VLL, 302, 12 pll.
1834. Wissman. Entomologische Notizen IN, Stett. Entom. Zeitg., 1848, p. 79.

## NEW RHYNCHOPHORA. III.

By Chas. Schaeffer,<br>Brooklyn, N. Y.<br>Rhynchitide.

## Eugnamptus pallidus, new species.

Form of collaris, color testaceous. Head behind the eyes feebly narrowing to base; between the eyes a feeble fovea; punctuation sparse; beak carinate at middle ; antennæ slender. Prothorax closely and rather coarsely punctate, with a feeble median impression. Elytra with rows of large, approximate punctures; intervals flat, with an irregular row of smaller punctures; surface as usual, clothed with semi-erect, pale hairs. Length 4 mm .

Huachuca Mts., Arizona.
The uniform pale color, the larger eyes of the male and the slender antennal joints distinguish pallidus from any of our other species.

## Rhynchites macrophthalmus, new species.

Form and color of cratus but elytra shorter ; punctuation of thorax and elytra less dense; beak in both sexes shorter and eyes much more prominent. Length 2 mm .

Brownsville, Texas.
This distinct little species seems to be closely allied to aratoides Fall, which is said to differ from aratus by the more closely punctate head and a longitudinal median impressed line on the first three ventral segments of the male. The punctuation of the head of macrophthalmus is nearly the same as in aratus but more evident, and the three ventral segments of the male are not longitudinally impressed at middle.

## Otiorhynchide.

## Panscopus alternatus, new species.

Form and color of erinaceus but a little more slender and alternate elytral intervals elevated, the others flat. Beak carinate, apex emarginate; between the eyes a narrow linear fovea ; in front of the eyes transversely impressed. Antennal funicle a little more slender than in erinaceus, especially the first and second joints. Thorax as in erinaceus but surface more uneven. Elytra as in crinaceus but the intervals three, five and seven distinctly elevated, the first or sutural more or less so, the others flat; the elevated intervals with a row of pale setre, which are absent on the flat intervals. Legs and underside of body as in erinaceus. Length $6-7 \mathrm{~mm}$.

## Black Mountain, North Carolina.

This species differs from erinaceus by the narrower beak, longer first and second funicular joints of antennæ, the absence of the strong arcuate impression between the eyes and the alternately elevated elytral intervals.

A few specimens of this species and Paraplinthus shermani were taken by sifting old leaves in September.

## Pandeletejus cavirostris, new species.

Above clothed with small, rounded, yellowish-cinereous and brown scales; the dark scales condensed in an irregular spot of variable size behind middle; elytral intervals with sparsely placed, short, pale setæ. Beak deeply, arcuately emarginateexcavate at apex, the emargination limited behind by an arcuate ridge; median impressed line distinct. Eyes ovate. Scrobes arcuate, long, passing below the eyes nearly to the middle of the underside of the beak. First and second joints of anten* nal funicle equal in length but the first much stouter, the remaining joints short and nearly equal in length among themselves, the outer gradually increasing in width; antennal club three jointed, as long or nearly as long as 'the preceding six joints. Prothorax about as wide as long; sides very feebly arcuate, slightly constricted at base but not at apex. Elytra convex, about twice wider at base than the prothorax at base ; sides slightly widening towards middle, thence arcuately narrowing to apex,
the latter separately rounded; disk with rows of moderately large, approximate punctures ; intervals flat. Body beneath and legs rather sparsely clothed with elongate scales; first ventral suture rather strongly arcuate at middle. Anterior coxa narrowly separated; anterior femora not very much stouter and longer than the others; anterior tibix feebly bent at apex and denticulate on the inner margin. Length 5 mm .

Brownsville, 'Texas.
This somewhat aberrant species differs from our others by the rather deeply excavate-emarginate apex of beak, wider and more conrex elytra, longer antemal club, stronger arcuate first ventral suture and shorter front legs. The vibrissæ, or bristly hairs on the underside of thorax are also absent in this species, but are replaced by a very few pale setæ, which, however, are easily lost.

## Pandeletejus ovipennis, new species.

Elongate, oval; densely covered with pale and brown scales, the latter forming a vitta on each side of middle of thorax and also more or less evident on some of the elytral intervals. Beak triangularly emarginate at apex, about as long as wide, feebly narrowing to apex ; median impressed line rather feeble. Eyes, small rounded. Scrobes feebly arcuate, distant from the eyes and rather long. Prothorax about as long as wide ; sides feebly arcuate and slightly constricted at base and apex ; disk somewhat coarsely but not densely punctate. Elytra at base about as wide as the prothorax at base; humeri absent; sides arcuate; the punctures of the regular series moderate; intervals more or less convex. Anterior femora moderately large; anterior tibise slightly sinuate on inner margin and with about four denticles. Underside of body densely scaly. Length 4 mm .

Brownsville, Texas.
The color of the upper surface is variable, some specimens are almost entirely dark, others nearly pale and the scales on the underside of body are in a few greenish.

## Pandeletejus robustus, new species.

Color and markings nearly as in hilaris but larger and of more robust form. Beak nearly quadrate, feebly narrowing to apex, which is slightly triangularly emarginate ; disk with distinctly impressed median line. Eyes small, rounded. Scrobes short, nearly straight, not passing beneath the eyes. First joint of antennal funicle nearly as long as the two following joints. Prothorax as long as wide; sides broadly arcuate, constricted at base and apex, but more strongly at base ; disk rather coarsely but not closely punctate and densely covered with cinereous and pale brown scales on each side of middle a longitudinal line of black scales, which is arcuate at middle. Elytra distinctly wider than the thorax at base, gradually widening towards apex ; surface densely clothed with cinereous, pale and dark brown scales, the dark scales forming an irregular, oblique fascia below middle and some more or less distinct spots above and below this fascia. Anterior tibire slightly bent at apex, inner margin denticulate. Length 5-6 mm.

Huachuca Mts., Arizona.

The large size, more robust form, and the short antennal scrobes make this an easily recognisable species.

## Pandeletejus submetallicus, new species.

More or less greenish-metallic, generally more so on the underside than above. Beak short, transverse, deeply triangularly emarginate at apex. Eyes small, rounded. Scrobes rather strongly arcuate and long, but distant from the eyes. Antennæ testaceous, shining, scarcely at all pubescent ; first joint of funicle stout, as long as the second and third together. Prothorax cup-shaped, wider at apex than base, sides feebly arcuate, rather strongly constricted near base, sinuate near apex; surface coarsely, not densely punctate. Elytra at base much wider than the thorax at base; sides gradually widening to about apical third, thence arcuately narrowing to apex; disk with regular rows of moderately large punctures; intervals flat, each with a single row of small, sparse punctures. First ventral suture strongly arcuate at middle. Anterior femora not elongate ; anterior tibiæ not dentate within. Length 3.5 mm .

Beaver Co., Utah.
'This little species looks somewhat strange among the other species of Pandeletejus, but as it has the principal characters of this genus I prefer to leave it here at present.

## Table of the Species of Pandeletejus.

1. Beak deeply, arcuately excavate-emarginate at apex ; the emargination limited
behind by an arcuate ridge.
cavirostris
Beak more or less emarginate or truncate at apex ; without ridge limiting the
emargination
2. Humeri absent, elytra oval with base as wide as the base of thorax, the latter
feebly arcuate at sides with feeble basal and apical constriction
ovipennis
Humeri distinct, base of elytra very distinctly wider than the base of prothorax.

3
3. Antennal funicle six-jointed; head and beak in front of the eyes concare; beak triangularly emarginate

$\qquad$
rotundicollis4
4. Head, when viewed laterally, very convex, thorax cup-shaped, distinctly wider at apex than at base, scales of upper surface uniform, not forming a pattern ..... 9
Head between the eyes feebly convex or flat; thorax at apex as wide or veryslightly narrower than at base; scales of upper surface variegated, producing amore or less distinct design5
5. First joint of antennal funicle longer than the two following joints ; basal thoracic constriction short and feeble simplarius
First joint of funicle as long as the two following joints
First joint of funicle as long as the two following joints ..... 6 ..... 6
6. Apex of beak truncate ..... hilaris
Apex of beak emarginate ..... 7
7. Prothorax feebly arcuate at sides .....  8
Prothorax broadly arcuate at sides ; beak feebly triangularly emarginate at apex; form large and robust ..... robustus
8. Alternate clytral intervals not elevated; general color grey. cinereas
Alternate elytral intervals more or less elevated ; scales of upper surface brownish, with a more or less metallic lustre $\qquad$ sublropicus
9. Scales on underside and legs greenish metallic, feelly so on the upper surface; beak sharply triangularly emarginate at apex ; anterior femora scarcely longer than the others $\qquad$ submetallicus

## Curculionid.e.

## Endalus robustus, new species.

Color as in limatulus, but the beak is stouter and scarcely curved and densely, rather coarsely punctate. Antenne inserted at apical third. Eyes separated by a little more than their own width. Prothorax about twice as wide as long; sides evenly moderately strongly arcuate, apex constricted ; surface more coarsely punctate than in limatulus. Elytra wider than the prothorax; humeri obliquely rounded; sides feebly narrowing to apical fourth; punctures of the strixe elongate; intervals flat, rather sparsely and finely punctate, each with a row of large, more distant punctures, each puncture bearing a short white seta. Underside covered rather densely with dirtygrey scales. Length 4 mm .

Brownsville, Texas.
This species has a shorter elytra than the male of limatulus, a different shaped and more strongly punctate prothorax, a stouter, flatter beak and more widely separated eyes.

## Thysanocnemis balaninoides, new species.

Pale rufo-testaceous, scales yellowish-white. Beak as long as head and prothorax ; narrow, cylindrical ; on each side striate; striæ punctate. Antennæ inserted slightly below middle; the first funicular joint as long as the two following. Prothorax twice as wide as long, sides very feebly arcuate, at about apical third arcuately narrowing to apex ; the latter moderately constricted ; surface rather densely clothed with transversely directed yellowish-white scale-like hairs. Elytra wider than the prothorax : humeri obliquely rounded; surface moderately densely clothed with yellowish-white, elongate narrower scales ; each interval with a row of rather sparsely placed, wider, elongate scales. Body beneath clothed with pale, oval scales; last ventral with a shallow, elongate median impression ; pygidium rather convex. Anterior tibixe narrower and straight inside. Length 3 mm .

Brownsville, 'Texas, one male.
The very pale color, the narrow, cylindrical, rather longer beak and the narrowly separated eyes distinguishes this from our known species. In the formation of the head and beak it resembles species. of the genus Balanimus.

## Tychius griseus, new species.

Form of leclus; black, moderately densely clothed with narrow, hair-like, yel-lowish-cinereous scales, beneath with broader white scales. Beak rather short, scarcely as long as the prothorax, of nearly equal width throughout, except at the
extreme apex ; densely covered with narrow scales, near apex glabrous and rather sparsely punctate at sides. Antennæ inserted slightly below middle; 7 -jointed, second funicular joint much shorter than the first and only slightly longer than the third. Prothorax slightly longer than wide; sides in basal half feebly arcuate, then gradually narrowing to apex, which is rather feebly constricted. Elytra wider than the prothorax, humeri obliquely rounded; sides gradually, arcuately narrowing to apex ; apex rather broadly rounded. Length 2.5 mm .; width 1 mm .

Ithaca, New York. One specimen retained from material sent me by Mr. J. C. Bradley for determination. By the small, slender scales this species is related to sordidus, but is much smaller, of more elongate form and has a much shorter second funicular joint.

## Tychius suturalis, new species.

More broadly oval than lineellus but smaller, scales of upper surface ferruginous, except the sutural interval, an antescutellar spot on thorax and the underside, white. Beak thick at base, rapidly narrowing toward apex ; densely covered with pale scales in about basal half, apical part smooth and shining. Head above the eyes transversely impressed. Prothorax about as wide at base as long: sides arcuately narrowing from base to apex, the latter rather feebly constricted ; the coarse punctuation entirely concealed by the vestiture which consists of oval, uniform, ferruginous scales, whitish in an antescutellar spot and a small subbasal spot near each side. Elytra slightly wider than the thorax at base ; broadly oval ; densely clothed with elongateoval, ferruginous scales of uniform size, those of the sutural interval and umbone whitish; strix with a row of sparsely placed scales, of the same size as those on the intervals. Body beneath densely clothed with slightly larger, white scales, those on the legs pale-yellowish. Length 3.5 mm .

## Huachuca Mts., Arizona.

The absence of elytral setæ and the 7 -jointed antennal club place this species in Casey's group I; from the other species of which it differs by the short robust form, the ferruginous color of the upper surface with the sutural interval white. The elytral apices are rather separately rounded, but not as broadly as in our two species of Sibinia.

## Tychius pallidus, new species.

Form of Sibinia ochreosa; scales of upper surface rather larger and of uniform size, pale ocbreous and white; elytral intervals with a row of short, semi-erect setr. Head and beak moderately densely clothed with whitish scales which are narrower in front of the eyes; apical half of beak glabrous, shining. Antennæe inserted about middle; funicle 6 -jointed. Thorax abont twice as wide as long; sides arcuately narrowing to apex, the latter moderately constricted ; surface covered rather densely with moderately large, pale ochreous scales, which become whitish at sides. Elytra scarcely one half wider than the thorax ; humeri obliquely rounded; sides parallel to about apical third, thence arcuately narrowing to apex ; surface densely clothed with rather large ochreous and white scales, the latter color more evident at the humeri and in a somewhat oblique fascia from the scutellum to about the middle of elytra;
intervals convex, with a row of short, semi-erect setæ. Body bencath clothed with large white scales and on each side near apex a few narrow, elongate, decumbent squamules. Length 2 mm .

Brownsville, 'Texas.
On each side of the prothorax are a very few narrow, elongate, decumbent scales. In some specimens the whitish scales are more numerous on the elytra than the pale ochreous scales. The apices of the elytra are separately rounded but not as broadly as in our two species of Sibinia.

## Tychius albidus, new species.

Form of setosus; reddish-brown, legs, beak and antenne paler above and below, covered with rather large white scales, intermixed on the elytra with narrow, elongate recumbent scales, without erect setæ. Head and basal part of the beak densely scaly, rest of beak glabrous. Antennæe inserted at about the middle of the beak, funicle 6 -jointed. Prothorax wider than long; sides almost parallel to about apical third, thence arcuately narreving to apex, the latter constricted; surface moderately densely covered with large," rounded, white scales, intermixed with a very few narrow, elongate scales of the same color. Elytra about one-half wider than the base of thorax ; humeri broadly rounded ; strix as wide or almost as wide as the intervals ; surface sparsely clothed with larger, rounded white scales, denser on the sutural interval and the humeral region, and narrower, elongate white scales on the intervals which are numerous at sides and apex. Body beneath more densely covered with large, oval white scales. Length 1.6 mm .

Death Valley, April, $\mathbf{1 8 9 \mathbf { 1 } , \text { on Prosopis juliflora, collected by }}$ Koebele and given me by Mr. E. A. Schwarz.

It is possible that the large scales are easily lost and that in fresh or well preserved examples the scales are more mumerous than in the specimen before me.

Readily distinguished from any known species of Casey's group IV by the form of the elytral scales. This as well as several of the smaller species with 6-jointed antennal funicle have the elytral apices more or less distinctly separately rounded which somewhat bridges over the difference between the genera Sibinia and Tychius. In the "Biologia" Mr. Champion includes all the Mexican species with 6jointed antemnal funicle in Sibinia, which seems to me a better course than the separation of Sibinia from Tychius on the form of the elytral apices.

## Eulechriops pictus, new species.

Rather robust, ovate, black, upper surface variegated with ochreous, white and black scales. Beak slightly curved; naked; smooth along the median line; rather densely punctate at sides. Antenne inserted slightly above middle ; second joint of
funicle about as long as the first ; club small, the first as long as the remaining joints. Eyes oval, separated by about one fourth of their own width. Head densely covered with ochreous scales. Prothorax longer than wide, convex ; sides broadly rounded, feebly constricted at apex ; disk very coarsely and densely punctate, a small narrow smooth space at middle, continued half way to the apex as a narrow carina; surface clothed densely at base with narrowly oval scales, which extend rather sparsely to apex; near the side margins the scales are larger and white or yellowish white. Elytra wider than the thorax at base ; humeri rounded ; sides feebly arcuately narrowing to apex; near apex sinuate; apices conjointly rotundate-truncate; surface deeply striate, intervals flat and coarsely punctate; the basal region densely clothed with oval whitish scales, another white fascia of pale scales below middle but not as dense as the basal fascia; apex covered with ochreous scales: between the basal and submedian fascia and below the latter and apex the surface is black with a few scattered ochreous scales. Body beneath covered with oval, white scales, which are narrower and more elongate along the middle. Mesosternal excavation deep, metasternum declivous in front. Legs short ; femora not sulcate and unarmed. Length 4.25 mm., width 2 mm .

## Huachuca Mts., Arizona.

The genus Eulechriops is closely allied to Lechriops (Gelus Cas., Piazurus Lec.) from which it differs principally by the unarmed, noncarinate femora.

From a specimen sent him as Copturus minutus by Professor Wickham, Mr. Champion * placed Zygomicrus doubtfully as a synonym of Eulechriops. He was apparently not certain of the correctness of the identification, probably misled by Major Casey's statement that the mesosternum in Zygomicrus is not excavated. In mimetus and sobrimus the mesosternum is distinctly excavated, the femora unarmed and not carinate, which places these two species plainly in the genus Eulechriops, of which Zygomicrus, described a year later, is a synonym.

## Scolytide.

## Chramesus asperatus, new species.

Form of icorice, black, tarsi and antennæ testaceous; elytra with more or less distinct rows of small, narrow scales and each interval with a row of longer, stouter, erect scales. Head in the male broadly impressed, very finely reticulate; in the female flat, feebly, transversely elevated between the antennal insertion. Prothorax wider than long; sides broadly arcuate; apex scarcely constricted; surface indistinctly reticulate, with rather large, not densely placed muricate punctures, which become strongly asperate towards the sides, each puncture bearing a moderately long, semi-erect, scale-like hair. Elytra as wide as the thorax at base; sides almost parallel ; apex broadly rounded, punctate-striate ; striæ scarcely impressed ; intervals feebly convex. Abdomen sparsely clothed with pale hairs. Length $1.75^{-2} \mathrm{~mm}$. : width 1-1.2 mm.

[^0]Chiricahua Mts., Arizona (E. A. Schwarz).
Very closely allied to icorice but the thorax, especially in the male, is wider and more strongly asperate.

A single female from the Huachuca Mts., has the strix more deeply impressed and the median row of punctures on each interval strongly muricate, but does not seem to differ otherwise.

## Chramesus dentatus, new species.

Narrower than icoric, color black, elytra and legs brown, antenne paler; elytral intervals with sparsely placed, rounded, pale scales, and each with a row of erect, longer scales. Head in the male broadly impressed ; surface finely reticulate and clothed rather sparsely with cinereous hairs; apex of beak with a conical tubercle at middle ; the female has the front rather flat, surface reticulate and sparsely punctate; from each puncture arises a scale-like hair, at middle a round, fovea-like puncture and like the male at apical margin a small, conical tubercle. Prothorax wider than long; sides broadly rounded, convergent to apex which is scarcely constricted; base as usual, bisinuate; surface reticulate, with not densely placed, rather large punc. tures, which are strongly muricate at sides. Elytra scarcely wider at base than the thorax ; punctate-striate, striæ not deeply impressed; intervals feebly convex and sparsely punctate. Body beneath sparsely clothed with cinereous hairs which are at apical margins slightly stouter. Length 1.75 mm .; width 1 mm .

Huachuca Mts., Arizona; breeding abundantly in oak twigs girdled by Oncideres quercus.

An easily known species by its relatively elongate form, the conical tubercle at apex of beak and the smaller antennal club.

## Chramesus subopacus, new species.

Form of icorice but much larger; color black, antenne and tarsi testaceous; moderately densely clothed above with cinereous or yellowish-cinereous appressed scales, which are smaller and rounded on the elytra and each interval with a row of short-erect, larger scales. Head in the male rather deeply excavated ; side-margins slightly below the middle of the eyes suddenly raised; shining in a subtriangular apical space ; above this the surface subopaque and finely reticulate-punctate; in the female the head is somewhat convex, finely reticulate and sparsely punctate, dull; apical and side margins distinctly beaded. Pothorax wider than long ; sides rounded ; base much wider than apex ; the latter scarcely constricted ; disk not densely punctate, at sides a few asperities. Elytra as wide as the prothorax; basal margin strongly carinate; sides nearly parallel; apex broadly rounded, punctate-striate; striæ feebly impressed, punctures moderate; intervals moderately wide and nearly flat ; the row of median punctures from which the erect setre arise, the three or four near suture very strongly muricate in the female. Underside sparsely clothed with cinereous hairs, apical margin fringed with a row of pale setr. Length 2.25 mm .; width 1.5 mm .

## Huachuca Mts., Arizona.

The description of the Central American tumidulus fits this species
rather closely, but the differences given in the remarks following the description in comparing it with icorice do not agree very well with the above described species.

The female is rather dull while the male is more shining. The vestiture of the prothorax is not uniform, some of the scales are longer and there are here and there a few very narrow, hair-like scales.

## Phlœotribus texanus, new species.

Similar to frontalis but of slightly shorter form and darker color ; thorax more deeply punctate and more coarsely asperate in front and at sides; punctures of the elytral striæ rather larger; the tubercles on the intervals smaller and more widely spaced with the setæ arising from or near these tubercles shorter and slightly stouter, the front of the head in the male more deeply impressed, with the sides from the eye to the small acute tubercle distinctly elevated. The female has at middle of the faint crescentic elevation of the front a small fovea-like puncture. Length 2 mm . ; width 1 nm .

Brownsville, Texas.

## A NEW ORCHELIMUM FROM STATEN ISLAND AND NEW JERSEY.

By Wm. T. Davis, New Brighton, N. Y.

Several years ago a specimen of Orchelimum with quite a straight ovipositor was found on Staten Island. In September, 1907, the same species was collected in considerable numbers on the salt meadows at Tuckerton, N. J., and Mr. Lewis B. Woodruff has shown me an example from Rockaway, Long Island, N. Y.

In having a somewhat straight ovipositor the insect resembles delicatum Bruner and gladiator Bruner from the Middle West, and fidicimium Rehn and Hebard from northern Florida. The sub-genital plate does not reach the tips of the cerci as in delicatum, and according to Mr. Blatchley, who has kindly compared it with authentic gladiator, it is much more slender in body, tegmina and legs than that species. In the two species mentioned and in fidicinium the hind femora are said to be without spines, whereas in the present species each hind femur usually has from one to three spines. Two males in thirteen examples are without spines. The females are more often without them.


[^0]:    * Biol. Cent. Am., Vol. IV, pt. 5, p. II3.

